

ATTACHMENT J2

Andrews AFB Water Distribution System

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J2 Andrews AFB Water Distribution System

J2.1 Andrews AFB Overview

Andrews AFB is located in Prince George's County, Maryland approximately 5 miles southeast of Washington, D.C. Andrews AFB exists as an active military installation so the 89th Airlift Wing (AW) can provide worldwide airlift and logistical support for the President of the United States, and other key members of the government. The 89th AW also operates and maintains the base. The major tenants of the base include the following:

- ?? Federal Aviation Administration
- ?? 459th Airlift Wing (Air Force Reserve)
- ?? 113th Fighter Wing, District of Columbia Air National Guard
- ?? The Air National Guard Readiness Center
- ?? Naval Air Facility
- ?? Marine Aircraft Group 49, Detachment A
- ?? DET 302, Air Force Office of Special Investigations
- ?? 317th USAF Recruiting Squadron

Main Base - Andrews AFB main base occupies approximately 4,346 acres and the base is a major employer in the county. It has been built up continuously since 1945 and currently includes approximately 457 air force buildings comprising approximately 5,188,000 Square Feet (SF), 41 non-Air Force buildings comprising approximately 762,000 SF, and 686 military family housing buildings comprising approximately 3,003,000 SF. The Air Force building total includes seven dormitory buildings (299,000 SF), 34 visitor and temporary lodging buildings (189,000 SF), 2 dining halls (25,000 SF), 14 hangars (1,057,000), and 400 other miscellaneous buildings. There are no programmed major demolition programs or construction programs that would significantly change the base facility makeup or utility consumption other than the recent (Fiscal Year 2003) project to demolish the 53 housing buildings on the eastern side of the runway. These demolished housing unit laterals are not included in the contract.

Brandywine Receiver Site - The Brandywine site is located about 5-miles south of the main base. It occupies approximately 1653 acres of land and has been in use since 1955. The receiver facility and the AFSATCOM operations building are the only facilities that are routinely occupied on this site.

Davidsonville Transmitter Site - The Davidsonville site is located approximately 20 miles east of Washington D.C. It occupies approximately 852 acres of land and has been in use since 1955. The transmitter facility is the only facility that is routinely occupied on this site.

J2.2 Water Distribution System Description

J2.2.1 Water Distribution System Fixed Equipment Inventory

The Andrews AFB water system consists of all appurtenances physically connected to the distribution system from the point in which the distribution system enters the base to the point of demarcation defined by the Right-of-Way instrument (RFP Attachment J41, Exhibit B). The system may include, but is not limited to, pipelines, valves, fire hydrants, water storage facilities, exterior backflow prevention devices, and meters. It does not include any water rights. The following description and inventory is included to provide the Contractor a general understanding of the size and configuration of the distribution system. The Government makes no representation that the inventory is accurate. The Contractor shall base the proposal on site inspections, information in the technical library, other pertinent information, and to a lesser degree the following description and inventory. Under no circumstances shall the Contractor be entitled to any rate adjustments based on the accuracy of the following description and inventory.

Specifically excluded from the water distribution system privatization are irrigation systems and the fire protection deluge systems as identified in the Right-of-Way document. The excluded fire protection systems located on the main base include and extend from storage tanks (1730, 3460, and 5019) and pump facilities (1731, 3461, 5019). The excluded fire protection system at the Brandywine Site includes and extends from the dedicated water well, firewater storage tank (facility 12) and the associated pump house. The excluded Davidsonville Site fire protection system includes and extends from the dedicated water well, firewater storage tank and the associated fire pump located in building 5.

J2.2.1.1 Main Base Description

The main base has no potable water treatment facilities or wells and the entire demand for potable water is supplied by the Washington Suburban Sanitary Commission (WSSC). WSSC has service mains located along the north, east and western boundaries of the main base. Water is currently provided to the main base through a 14-inch main located along the northern boundary near Forestville Road and an 8-inch main located on the eastern boundary near Fechet Avenue. The water distribution system includes more than 2,000 laterals with almost 338,000 feet of pipe ranging in size from 1.5-inch up to 14-inches in diameter. It is estimated that the average depth of burial for the Asbestos pipe is 12 feet and all other pipe averages 4 feet. It is also estimated that 20% of all the piping lies beneath six inch thick pavements.

The water system at the main base also includes two 365 foot tall potable water storage towers. One has a capacity of 250,000 gallons (Facility 3589) and the other has a capacity of 500,000 gallons (Facility 4614). The water storage towers are not required for the adequate supply of water at the main base and have not been used since 1993. The water towers are not flushed and the water in them is stagnant. These tanks are to be either demolished, or rehabilitated and put into service, at the contractor's option per Section J2.11.

Under normal operating conditions the demand for water is met through the single 14-inch main along the northern boundary and the new (installed in FY 2001) 8-inch connection on Perimeter Road near the west gate. Little, if any, water flows onto the base from the 8-inch

main at Dower House Road on the east side of the Base. Water used by the base is metered at the 14-inch main and the new west-gate 8-inch main near where they enter the base; no metering is done at the 8-inch main at Dower House Road. A backflow prevention device at Dower House Road prevents water from leaving the base via the 8-inch main.

The network of fire hydrants connected to the water system is included as part of the system being privatized. However, there are three separate fire suppression (deluge) networks for the hangers located at the site that are not included in the privatization scope. Of these deluge networks not in scope, one provides service for the hangers along the eastern side of the flight line, one services the hangers along the western side of the line, and the third services the Air Force One Hanger. None of these deluge networks are included in the system being privatized.

There are typically no tracer wires on the water distribution system at this site. The only cathodic protection systems are serving the two water towers (Facilities 3589 and 4614).

J2.2.1.2Brandywine Receiver Site System Description

A water well located at the facility provides the potable water supply. An operator licensed in the State of Maryland supervises the treatment of water through an on-site plant. Treated potable water is stored in an elevated 15,000-gallon storage tank. Potable water is fed to the two buildings at the site through a 4-inch main. The fire protection system including the integral piping, water well, storage tank, and pump house is not in scope of the privatized system.

It is estimated that the average depth of burial for all pipe averages 4 feet. It is also estimated that 20% of all the piping lies beneath six inch thick pavements.

There are no tracer wires on the water distribution system at this site. The only cathodic protection on this site serves the elevated water tank.

J2.2.1.3Davidsonville Transmitter Site

A water well located at the facility provides the potable water supply. An operator licensed in the State of Maryland supervises the treatment of water through an on-site plant. Treated potable water is stored in an elevated 15,000-gallon storage tank. Potable water is fed to the two buildings at the site through a 4-inch main. The fire protection system including the integral piping, water well, storage tank, and pump house is not in scope of the privatized system.

It is estimated that the average depth of burial for all pipe averages 4 feet. It is also estimated that 20% of all the piping lies beneath six inch thick pavements.

There are no tracer wires on the water distribution system at this site. The only cathodic protection on this site serves the elevated water tower.

J2.2.1.4 Inventory

Table 1-A provides a general listing of the major water system fixed assets for the Andrews AFB water system included in the purchase.

Table 1-B provides a general listing of the major water system fixed assets for Brandywine Receiver Site water system included in the purchase.

Table 1-C provides a general listing of the major water system fixed assets Davidsonville Transmitter Site water system included in the purchase.

TABLE 1-A
Fixed Inventory – Main Base
Water Utility System Andrews AFB - Main Base

Item	Size	Quantity	Unit	Approximate Year of Construction
Cast Iron Pipe	1.5 inch	1,290	LF	1945
Cast Iron Pipe	2 inch	1,290	LF	1945
Cast Iron Pipe	3 inch	2,504	LF	1945
Cast Iron Pipe	3 inch	4,735	LF	1955
Cast Iron Pipe	3 inch	10,825	LF	1965
Cast Iron Pipe	3 inch	3,730	LF	1975
Cast Iron Pipe	4 inch	2,580	LF	1945
Cast Iron Pipe	4 inch	2,020	LF	1955
Cast Iron Pipe-	4 inch	7,700	LF	1965
Cast Iron Pipe	4 inch	1,692	LF	1975
Cast Iron Pipe	6 inch	7,305	LF	1945
Cast Iron Pipe	6 inch	9,710	LF	1955
Cast Iron Pipe	6 inch	1,712	LF	1965
Cast Iron Pipe	6 inch	403	LF	1975
Cast Iron Pipe	8 inch	13,761	LF	1945
Cast Iron Pipe	8 inch	17,005	LF	1955
Cast Iron Pipe	8 inch	20,478	LF	1965
Cast Iron Pipe	8 inch	3,895	LF	1975
Cast Iron Pipe	10 inch	7,910	LF	1945
Cast Iron Pipe	10 inch	480	LF	1955
Cast Iron Pipe	10 inch	7,470	LF	1965
Cast Iron Pipe	10 inch	1,317	LF	1975
Cast Iron Pipe	12 inch	840	LF	1945
Cast Iron Pipe	12 inch	265	LF	1955
Cast Iron Pipe	12 inch	360	LF	1965

Item	Size	Quantity	Unit	Approximate Year of Construction
Cast Iron Pipe	14 inch	5,160	LF	1945
Cast Iron Pipe	14 inch	3,075	LF	1955
Cast Iron Pipe	14 inch	3,320	LF	1965
Cast Iron Pipe	14 inch	7,570	LF	1985
Asbestos Cement Pipe	10 inch	290	LF	1965
Asbestos Cement Pipe	14 inch	27,830	LF	1945
Asbestos Cement Pipe	14 inch	15,440	LF	1955
Ductile Iron pipe	6 inch	830	LF	1955
Ductile Iron pipe	6 inch	685	LF	1985
Ductile Iron pipe	6 inch	20	LF	1995
Ductile Iron pipe	8 inch	2,900	LF	1955
Ductile Iron pipe	8 inch	950	LF	1965
Ductile Iron pipe	10 inch	900	LF	2003
Ductile Iron pipe	12 inch	350	LF	1995
Copper Pipe	2 inch	1,810	LF	1955
Copper Pipe	2 inch	7,020	LF	1965
Copper Pipe	2 inch	2,486	LF	1975
PVC Pipe	6 inch	7,040	LF	1975
PVC Pipe	6 inch	1,470	LF	1985
PVC Pipe -	8inch	21,220	LF	1975
PVC Pipe	8inch	200	LF	1995
Valve, Gate	2 inch	12	EA	1965
Valve, Gate	3 inch	145	EA	1975
Valve, Gate	4 inch	52	EA	1975
Valve, Gate	6 inch	24	EA	1945
Valve, Gate	6 inch	35	EA	1955
Valve, Gate	6 inch	6	EA	1965
Valve, Gate	6 inch	24	EA	1975
Valve, Gate	8 inch	35	EA	1945
Valve, Gate	8 inch	50	EA	1955
Valve, Gate	8 inch	75	EA	1965
Valve, Gate	8 inch	63	EA	1975
Valve, Gate	8 inch	11	EA	1995
Valve, Gate	10 inch	16	EA	1965

Item	Size	Quantity	Unit	Approximate Year of Construction
Valve, Gate	10 inch	10	EA	2003
Valve, Gate	12 inch	2	EA	1945
Valve, Gate	12 inch	5	EA	1955
Valve, Gate	12 inch	2	EA	1995
Valve, Gate	14 inch	34	EA	1945
Valve, Gate	14 inch	21	EA	1955
Valve, Gate	14 inch	4	EA	1965
Valve, Gate	14 inch	8	EA	1985
Water Meters	1"	1	EA	1995
Water Meters	1 1/2"	3	EA	1995
Water Meters	2"	10	EA	1995
Water Meters	2 1/2"	2	EA	1995
Water Meters	3"	1	EA	1995
Water Meters	4"	7	EA	1995
Water Meters	8"	3	EA	1995
Backflow Devices	8"	2	EA	2001
Backflow Devices	6"	1	EA	1995
Backflow Devices	2"	3	EA	1995
Fire Hydrants with Valves	3 way w/ 6" supply	71	EA	1945
Fire Hydrants with Valves	3 way w/ 6" supply	43	EA	1955
Fire Hydrants with Valves	3 way w/ 6" supply	109	EA	1965
Fire Hydrants with Valves	3 way w/ 6" supply	14	EA	1975
Fire Hydrants with Valves	3 way w/ 6" supply	1	EA	1995
Fire Hydrants with Valves	3 way w/ 6" supply	26	EA	2003
Water Tower (Facility 3589) (Must be demolished or Refurbished))	36'ift, 250,000 gal	1	EA	1944
Water Tower (Facility 4614)(Must be demolished or Refurbished)	36'ift, 500,000 gal	1	EA	1961
Impressed Current Systems (Protecting Water Towers 3859 and 4614) (Not necessary if				

Item	Size	Quantity	Unit	Approximate Year of Construction
<i>Water Towers are Demolished)</i>				
<i>Wiring</i>	<i>#8</i>	<i>10,000</i>	<i>LF</i>	<i>1995</i>
<i>Rectifiers</i>	<i>30VDC 15A</i>	<i>2</i>	<i>EA</i>	<i>1995</i>
<i>Anodes</i>	<i>Magnesium 48#</i>	<i>80</i>	<i>EA</i>	<i>1995</i>
Main Base Housing Areas				
<i>Cast Iron Pipe</i>	<i>3 inch</i>	<i>1,721</i>	<i>LF</i>	<i>1945</i>
<i>Cast Iron Pipe</i>	<i>4 inch</i>	<i>378</i>	<i>LF</i>	<i>1975</i>
<i>Cast Iron Pipe</i>	<i>6 inch</i>	<i>1,680</i>	<i>LF</i>	<i>1945</i>
<i>Cast Iron Pipe</i>	<i>6 inch</i>	<i>11,313</i>	<i>LF</i>	<i>1965</i>
<i>Cast Iron Pipe</i>	<i>6 inch</i>	<i>7,077</i>	<i>LF</i>	<i>1975</i>
<i>Cast Iron Pipe</i>	<i>8 inch</i>	<i>6,759</i>	<i>LF</i>	<i>1945</i>
<i>Cast Iron Pipe</i>	<i>8 inch</i>	<i>20,672</i>	<i>LF</i>	<i>1965</i>
<i>Cast Iron Pipe</i>	<i>10 inch</i>	<i>873</i>	<i>LF</i>	<i>1975</i>
<i>Ductile Iron Pipe</i>	<i>3 inch</i>	<i>301</i>	<i>LF</i>	<i>1985</i>
<i>Ductile Iron Pipe</i>	<i>4 inch</i>	<i>1,602</i>	<i>LF</i>	<i>1985</i>
<i>Copper Pipe</i>	<i>1 1/2 inch</i>	<i>3,000</i>	<i>LF</i>	<i>1955</i>
<i>Copper Pipe</i>	<i>1 1/2 inch</i>	<i>7,400</i>	<i>LF</i>	<i>1975</i>
<i>Copper Pipe</i>	<i>1 1/2 inch</i>	<i>10,700</i>	<i>LF</i>	<i>1985</i>
<i>Copper Pipe</i>	<i>2 inch</i>	<i>820</i>	<i>LF</i>	<i>1955</i>
<i>Copper Pipe</i>	<i>2 inch</i>	<i>3,274</i>	<i>LF</i>	<i>1975</i>
<i>Copper Pipe</i>	<i>2 inch</i>	<i>5,212</i>	<i>LF</i>	<i>1985</i>
<i>PVC Pipe</i>	<i>8inch</i>	<i>13,428</i>	<i>LF</i>	<i>1985</i>
<i>Valve, Gate</i>	<i>1.5 inch</i>	<i>60</i>	<i>EA</i>	<i>1955</i>
<i>Valve, Gate</i>	<i>1.5 inch</i>	<i>148</i>	<i>EA</i>	<i>1975</i>
<i>Valve, Gate</i>	<i>1.5 inch</i>	<i>214</i>	<i>EA</i>	<i>1985</i>
<i>Valve, Gate</i>	<i>2 inch</i>	<i>8</i>	<i>EA</i>	<i>1955</i>
<i>Valve, Gate</i>	<i>2 inch</i>	<i>32</i>	<i>EA</i>	<i>1975</i>
<i>Valve, Gate</i>	<i>2 inch</i>	<i>52</i>	<i>EA</i>	<i>1985</i>
<i>Valve, Gate</i>	<i>3 inch</i>	<i>9</i>	<i>EA</i>	<i>1945</i>
<i>Valve, Gate</i>	<i>4 inch</i>	<i>2</i>	<i>EA</i>	<i>1975</i>
<i>Valve, Gate</i>	<i>4 inch</i>	<i>22</i>	<i>EA</i>	<i>1985</i>
<i>Valve, Gate</i>	<i>6 inch</i>	<i>8</i>	<i>EA</i>	<i>1955</i>
<i>Valve, Gate</i>	<i>6 inch</i>	<i>26</i>	<i>EA</i>	<i>1975</i>

Item	Size	Quantity	Unit	Approximate Year of Construction
Valve, Gate	6 inch	40	EA	1985
Valve, Gate	8 inch	18	EA	1945
Valve, Gate	8 inch	24	EA	1965
Valve, Gate	8 inch	22	EA	1985
Valve, Gate	10 inch	6	EA	1955
Fire Hydrants with Valves	3 way w/ 6" supply	11	EA	1945
Fire Hydrants with Valves	3 way w/ 6" supply	22	EA	1975
Fire Hydrants with Valves	3 way w/ 6" supply	56	EA	1985

Notes:
A = Ampere
EA = Each
GAL= Gallon
GPH = Gallons Per Hour
GPM = Gallons Per Minute
LF = Linear Feet
SF = Square Feet
= Pound
w/ = with
VDC = Volts Direct Current
HP = Horsepower

TABLE 1-B
Fixed Inventory – Brandywine Receiver Site
Water Utility System Andrews AFB - for Brandywine Receiver Site

Item	Size	Quantity	Unit	Approximate Year of Construction
Copper Pipe	3/4 inch	300	LF	1955
Steel Pipe	1 1/2 inch	1,300		1955
Steel Pipe	4 inch	630	LF	1955
Valve Gate	3/4 inch	1	EA	1955
Valve Gate	1 1/2 inch	2	EA	1955
Valve, Gate	4 inch	2	EA	1955
Water Pump Station, Bldg # 3				
Structure, Bldg 3	190 SF	1	EA	1985
Water Well Pumps, Bldg # 3	180 deep	1	EA	1985
Water Well Pump Controls	-	1	EA	1985
Water Wells	180 ft	1	EA	1985
Chlorination System	-	1	EA	1985

Item	Size	Quantity	Unit	Approximate Year of Construction
Water Meter (on well)	2 inch	1	EA	1965
Backflow Devices	2"	1	EA	1985
Elevated Water Tank Storage Bldg # 4	15,000 gal	1	EA	1955
Fire Hydrants	3 way w/ 4" supply	1	EA	1995
Impressed Current System (protecting elevated water storage tank)				
Wiring	#8	2000	LF	1995
Rectifiers	30VDC 15A	1	EA	1995
Anodes	Magnesium 48#	30	EA	1995

Notes:
A = Ampere
EA = Each
GAL= Gallon
GPH = Gallons Per Hour
GPM = Gallons Per Minute
LF = Linear Feet
SF = Square Feet
= Pound
w/ = with
VDC = Volts Direct Current
HP = Horsepower

TABLE 1-C
Fixed Inventory – Davidsonville Transmitter Site
Water Utility System Andrews AFB - Davidsonville Transmitter Site

Item	Size	Quantity	Unit	Approximate Year of Construction
Steel Pipe	1.5 inch	200	LF	1955
Steel Pipe	3 inch	350	LF	1955
Steel Pipe	4 inch	670	LF	1955
Valve, Gate	3 inch	1	EA	1955
Valve, Gate	4 inch	2	EA	1955

Water Chlorination and Pump Station, Bldg #3

Item	Size	Quantity	Unit	Approximate Year of Construction
Building Structure	512' SF	1	EA	1985
Chlorination System	-	1	EA	1985
Pressure Booster Pump	2HP	1	EA	1985
Water Well Pumps	18' Feet Deep	1	EA	1985
Water Well Controls	-	1	EA	1985
Water Wells	18' Feet Deep	1	EA	1985
Water Meter (on well)	2 inch	1	EA	1965
Backflow Devices	2 inch	1	EA	1985
Elevated Water Tank Storage Bldg # 4	15,000 gal	1	EA	1957
Impressed Current System (protecting elevated water storage tank)				
Wiring	#8	2000	LF	1990
Rectifiers	30VDC 15A	1	EA	1990
Anodes	Magnesium 48#	30	EA	1990

Notes:
A = Ampere
EA = Each
GAL= Gallon
GPH = Gallons Per Hour
GPM = Gallons Per Minute
LF = Linear Feet
SF = Square Feet
= Pound
w/ = with
VDC = Volts Direct Current
HP = Horsepower

J2.2.2 Water System Non-Fixed Equipment and Specialized Tools

Table 2 lists the other ancillary equipment (spare parts) and **Table 3** lists specialized vehicles and tools included in the purchase. Offerors shall field verify all equipment and tools prior to submitting his bid. Offerors shall make his own determination of the adequacy of all equipment and tools. The successful Contractor shall provide any and all equipment and tools, whether included in the purchase or not, to maintain a fully operating system under the terms of this contract.

TABLE 2
Spare Parts
Water System Andrews AFB

Qty	Item	Make/Model	Description	Remarks
None				

TABLE 3
Specialized Vehicles and Tools
Water System Andrews AFB

Description	Quantity	Location	Maker
None			

J2.2.3 Water Distribution System Manuals, Drawings, and Records

Table 4 provides a listing of manuals, drawings, and records that will be transferred with the system (e.g. water quality records, flow studies, etc.).

TABLE 4
Manuals, Drawings and Records
Water System Andrews AFB

Qty	Item	Description	Remarks
1 Set	Drawings	Water Supply System, Andrews AFB (Untitled)	1"=50' Sheets 1-113
1 Set	Drawings	Water Supply System, Andrews AFB	Tab G - 1, 2 Sheets
1 Set	Drawings	Off Base Site, Water Supply System (Brandywine Receiver Site)	Tab G – 1, sheet 1 of 3
1 Set	Drawings	Off Base Sites Layout, Water Supply System (Davidsonville Transmitter Site)	Tab G – 1, sheet 2 of 3
1 Set	Manuals	Lift Station Manuals	Only includes Lift Stations identified in Inventory as being installed in 2002
1 Set	Manuals	Well Operation Manuals	For Brandywine and Davidsonville Remote Sites

J2.3 Specific Service Requirements

The service requirements and standards for the Andrews AFB water distribution system are as defined in the Section C, *Description/Specifications/Work Statement*. The following standards are specific to the Andrews AFB water distribution system and are in addition to those found in Section C. If there is a conflict between standards described below and Section C, the standards listed below take precedence over those found in Section C.

Consumer Confidence Report (CCR): The Contractor shall submit as required by state regulations a CCR to the contracting officer.

Permits: Each of the remote sites has a withdrawal permit for the water well issued by the State of Maryland, and the operators of the water wells are licensed by the State of Maryland. As required by this contract, the Contractor shall demonstrate the ability to meet and shall establish the requirements to provide water service to Andrews AFB. It is the intent of this contract for the Contractor to obtain all permits and licenses necessary to provide water service to Andrews AFB and all off-installation sites.

Road Cuts: Road cuts for the purpose of installing new lines or expanding existing lines are not permitted on the following streets without the prior written approval of the Base Civil Engineer: Arnold Ave, Alabama Ave, Arkansas Ave, Atlanta Ave, Brookley Ave, Colorado Ave, C Street, D Street, F Street, Fetchet Ave, First Street, Menoher Drive, Patrick Ave, Perimeter Rd, San Antonio Blvd, Tuskegee Drive, and Virginia Ave (with the exception of emergency repairs due to line breaks/leaks). Road cuts made on any other street must follow 89th Civil Engineer Squadron guidelines for repairs.

Excavations: Any pit opened for the purpose of repair, replacement or installation of lines must be closed within 24 hours of repair, replacement or installation completion. All disturbed grounds must be completely restored within 5 working days to include sodding, seeding or hydroseeding, as appropriate for the area disturbed, which will be determined by the contracting officer.

Security Requirements: The contractor shall conform to all Base Regulations and directives that pertain to security, safety, traffic, fire and personnel clearances. To obtain passes for all work on Andrews AFB, the contractor shall submit the following information on each employee no later than 10 working days before expected arrival on base to 89 CES/CEOD at (301) 981-7416: a. Full Name of Individual; b. Social Security Number; c. Company Name; d. Driver's License Info (State and number); e. Vehicle State and Tag Number; f. Project individual is working. Contractor personnel will then have to report to the Visitor's Center, Bldg 1840, to obtain passes. Passes are good for up to one year.

Special Security Restrictions: The contractor shall perform and report the results of criminal history and background checks on any employee prior to working on Andrews AFB. The employees shall report to Maryland State Police for a State Criminal Records Check (SCRC) and a fingerprint check. Once the state check is complete and the findings are reported to the contracting officer, the contracting officer will complete the required paperwork for the contractor to receive access to the installation. These checks shall be at the contractor's expense.

Controlled Area Access: Specific facilities and areas on the installation have restricted access. Prior coordination with facility or security manager is required to schedule access.

Driving on Flightline: Prior to operating a vehicle on the flightline, the contractor shall complete flightline driver's training and pass the flightline driver's test, which will be provided and administered by the government.

Marking Utilities: Contractor shall establish procedures to mark utilities to support excavation work. For non-emergency requests, contractor shall complete all markings no

later than 24 hours prior to planned excavation. For emergency requests, contractor shall complete all markings within 1 hour of request.

J2.4 Current Service Arrangement

The Washington Suburban Sanitary Commission (WSSC) provides potable water to the main base of Andrews AFB. The Brandywine Receiver Site and the Davidsonville Transmitter site have separate water supply wells and treatment systems to supply the potable water. The annual water consumption at the main base in Fiscal Year 2002 was 496,118 KGAL. The maximum monthly consumption was 42,084 KGAL in March 2002 and the minimum monthly consumption was 39,000 KGAL in March 2002.

J2.5 Secondary Metering

The Base requires secondary meters for internal billings of their reimbursable customers, utility usage management, and conservation monitoring. The Contractor shall assume full ownership and responsibility for existing and future secondary meters IAW Paragraph C.3. A metering plan is attached as Attachment J51. Additional metering requirements beyond those identified below are included in the Metering Plan.

J2.5.1 Existing Secondary Meters

Table 5 provides a listing of the existing (at the time of contract award) secondary meters that will be transferred to the Contractor. The Contractor shall provide meter readings once a month for all secondary meters IAW Paragraph C.3 and J2.6 below.

TABLE 5
Existing Secondary Meters
Water System Andrews AFB

Meter Location	Meter Description		Meter Location	Meter Description
Bldg 1050 BB-11 Main Mechanical Room	8-inch		Bldg 1683 Home Traditions Retail Outlet	2-inch
Bldg 1050 D Wing Crawl Space	8-inch		Bldg 1684 Commissary	8-inch
Bldg 1051 Wing KB	4-inch		Bldg 1805 Four Seasons Store	1 ½-inch
Bldg 1075 East Mechanical Room	2 ½ -inch		Bldg 1810 Burger King	2-inch
Bldg 1075 West Mechanical Room	2-inch		Bldg 1811 New BX Water No. 1	4-inch
Bldg 1076 Temporary Lodging Facility	2-inch		Bldg 1811 New BX Water No. 2	4-inch
Bldg 1235 MWR Supply	1 ½-inch		Bldg 1811 New BX Water No. 3	4-inch
Bldg 1236 Automotive	1-inch		Bldg 1845 Security	1 ½-inch

Meter Location	Meter Description		Meter Location	Meter Description
Shop			Police Operations	
Bldg 1624 Dormitory	4-inch		Bldg 1889 NCO Club	4-inch
Bldg 1631 Dormitory	4-inch		Bldg 1892 Swimmers Bath House	3-inch
Bldg 1672 Bowling Alley	2-inch		Bldg 2487 Station Police	2-inch
Bldg 1673 Clothing Sales	2-inch (Broken)		Bldg 3106 ECM Pod Shop	2-inch
			Bldg 3415 Communications Facility	2-inch
			Bldg 3755 Mechanical Room	2-inch
			Bldg 4442 Golf Club House	2 ½-inch

J2.5.2 Required New Secondary Meters

The Contractor shall install and calibrate new secondary meters as listed in Table 6. New secondary meters shall be installed IAW Paragraph C.13, Transition Plan. After installation, the Contractor shall maintain and read these meters IAW Paragraphs C.3 and J2.6 below.

TABLE 6
New Secondary Meters
Water System Andrews AFB

Meter Location	Meter Description		Meter Location	Meter Description
Bldg 1025	2"		Bldg 1840	6"
Bldg 1026	1"		Bldg 1841	1 ½"
Bldg 1040	2 ½"		Bldg 1900	8"
Bldg 1041	2 ½"		Bldg 1914	8"
Bldg 1042	2 ½"		Bldg 1914	8"
Bldg 1043	2 ½"		Bldg 1914	8"
Bldg 1044	2 ½"		Bldg 1914	8"
Bldg 1045	3"		Bldg 1914	8"
Bldg 1046	1 ½"		Bldg 1915	2"
Bldg 1046	3"		Bldg 1931	8"
Bldg 1054	4"		Bldg 1932	8"
Bldg 1061	2"		Bldg 1933	2 ½"

Meter Location	Meter Description		Meter Location	Meter Description
Bldg 1063	2"		Bldg 1968	1 ½"
Bldg 1075	8"		Bldg 1969	1 ½"
Bldg 1170	2"		Bldg 2355	1 ½"
Bldg 1190	4"		Bldg 2492	4"
Bldg 1201	2 ½"		Bldg 2493	6"
Bldg 1204	4"		Bldg 2495	1"
Bldg 1206	2"		Bldg 2496	2"
Bldg 1208	2"		Bldg 2496	4"
Bldg 1216	2"		Bldg 251 1	1"
Bldg 1217	1 ½"		Bldg 3001	3"
Bldg 1220	3"		Bldg 3002	6"
Bldg 1223	2"		Bldg 3004	4"
Bldg 1225	4"		Bldg 3007	1"
Bldg 1228	4"		Bldg 3014	2"
Bldg 1229	2"		Bldg 3026	1"
Bldg 1234	3"		Bldg 3029	4"
Bldg 1237	6"		Bldg 3030	4"
Bldg 1240	2"		Bldg 3031	2"
Bldg 1245	2"		Bldg 3034	2"
Bldg 1280	4"		Bldg 3056	4"
Bldg 1281	1 ½"		Bldg 3066	2"
Bldg 1285	4"		Bldg 3066	2"
Bldg 1287	6"		Bldg 3066	6"
Bldg 1288	6"		Bldg 3066	8"
Bldg 1328	1 ½"		Bldg 3066	8"
Bldg 1330	1 ½"		Bldg 3086	1 ½"
Bldg 1345	2"		Bldg 3086	2 ½"
Bldg 1349	2"		Bldg 3086	6"
Bldg 1350	3"		Bldg 3086	6"
Bldg 1351	3"		Bldg 3109	2 ½"
Bldg 1352	2 ½"		Bldg 3119	4"
Bldg 1352	2 ½"		Bldg 3121	1"
Bldg 1352	2 ½"		Bldg 3148	4"

Meter Location	Meter Description		Meter Location	Meter Description
Bldg 1353	3"		Bldg 3148	8"
Bldg 1357	1 ½"		Bldg 3148	8"
Bldg 1358	3"		Bldg 3149	2"
Bldg 1360	2"		Bldg 3158	8"
Bldg 1361	2"		Bldg 3188	8"
Bldg 1362	2"		Bldg 3188	8"
Bldg 1363	2"		Bldg 3198	3"
Bldg 1365	2"		Bldg 3212	2"
Bldg 1366	2"		Bldg 3213	2"
Bldg 1367	2"		Bldg 3217	2"
Bldg 1368	2"		Bldg 3222	1 ½"
Bldg 1369	2"		Bldg 3227	4"
Bldg 1370	2"		Bldg 3227	4"
Bldg 1371	2"		Bldg 3236	2"
Bldg 1372	3"		Bldg 3252	4"
Bldg 1373	2"		Bldg 3257	2"
Bldg 1374	2"		Bldg 3285	1 ½"
Bldg 1375	2"		Bldg 3305	2"
Bldg 1376	2"		Bldg 3306	3"
Bldg 1385	3"		Bldg 3320	8"
Bldg 1398	1 ½"		Bldg 3355	8"
Bldg 1413	3"		Bldg 3382	2"
Bldg 1418	2"		Bldg 3409	3"
Bldg 1419	2"		Bldg 3412	1 ½"
Bldg 1429	1 ½"		Bldg 3413	1 ½"
Bldg 1430	1 ½"		Bldg 3416	2"
Bldg 1442	6"		Bldg 3416	8"
Bldg 1444	2 ½"		Bldg 3417	1 ½"
Bldg 1504	2"		Bldg 3422	1 ½"
Bldg 1506	2"		Bldg 3423	1 ½"
Bldg 1507	2"		Bldg 3424	6"
Bldg 1508	2"		Bldg 3446	1 ½"
Bldg 1509	2"		Bldg 3447	¾"

Meter Location	Meter Description		Meter Location	Meter Description
Bldg 1510	2"		Bldg 3448	1 ½"
Bldg 1522	2"		Bldg 3449	6"
Bldg 1524	2"		Bldg 3462	2"
Bldg 1527	2"		Bldg 3464	8"
Bldg 1535	3"		Bldg 3465	3"
Bldg 1535	3"		Bldg 3475	4"
Bldg 1535	3"		Bldg 3476	2"
Bldg 1535	3"		Bldg 3479	2"
Bldg 1535	3"		Bldg 3500	6"
Bldg 1539	8"		Bldg 3531	1 ½"
Bldg 1558	¾"		Bldg 3534	2"
Bldg 1558	2"		Bldg 3537	3"
Bldg 1558	3"		Bldg 3538	2 ½"
Bldg 1565	1 ½"		Bldg 3542	1 ½"
Bldg 1568	1 ½"		Bldg 3545	1 ½"
Bldg 1580	4"		Bldg 3545	1 ½"
Bldg 1600	4"		Bldg 3575	2"
Bldg 1601	6"		Bldg 3584	2"
Bldg 1602	4"		Bldg 3595	1 ½"
Bldg 1609	4"		Bldg 3608	2"
Bldg 1610	4"		Bldg 3608	10"
Bldg 1618	6"		Bldg 3613	2 ½"
Bldg 1620	4"		Bldg 3615	1 ½"
Bldg 1621	4"		Bldg 3617	1 ½"
Bldg 1622	4"		Bldg 3623	2"
Bldg 1628	3"		Bldg 3629	6"
Bldg 1629	6"		Bldg 3635	2"
Bldg 1632	2"		Bldg 3639	2"
Bldg 1642	2"		Bldg 3640	2"
Bldg 1656	2"		Bldg 3705	6"
Bldg 1660	4"		Bldg 3710	6"
Bldg 1668	8"		Bldg 3715	1 ½"
Bldg 1671	2"		Bldg 3744	2"

Meter Location	Meter Description		Meter Location	Meter Description
Bldg 1674	2"		Bldg 3745	4"
Bldg 1675	4"		Bldg 3756	2"
Bldg 1677	2"		Bldg 3763	1 ½"
Bldg 1679	6"		Bldg 3764	1 ½"
Bldg 1682	¾"		Bldg 3765	1 ½"
Bldg 1685	1 ½"		Bldg 3766	2 ½"
Bldg 1686	3"		Bldg 3802	2"
Bldg 1692	3"		Bldg 3812	2"
Bldg 1711	2"		Bldg 3821	1 ½"
Bldg 1714	4"		Bldg 4502	¾"
Bldg 1714	4"		Bldg 4522	1"
Bldg 1715	4"		Bldg 4570	¾"
Bldg 1732	4"		Bldg 4575	6"
Bldg 1734	8"		Bldg 4691	1 ½"
Bldg 1735	8"		Bldg 4694	2"
Bldg 1752	2"		Bldg 4700	6"
Bldg 1754	2"		Bldg 4730	2"
Bldg 1762	2"		Bldg 4751	1"
Bldg 1772	2"		Bldg 4783	8"
Bldg 1778	2"		Bldg 4864	1 ½"
Bldg 1781	1 ½"		Bldg 4882	2"
Bldg 1791	2"		Bldg 4886	2"
Bldg 1794	8"		Bldg 4919	3"
Bldg 1794	8"		Bldg 4923	1 ½"
Bldg 1794	8"		Bldg 4972	1 ½"
Bldg 1794	8"		Bldg 5014	6"
Bldg 1794	8"		Bldg 5016	2"
Bldg 1794	8"			
Bldg 1801	4"			

J2.6 Monthly Submittals

The Contractor shall provide the Government monthly submittals for the following:

1. Invoice (IAW G.2). The Contractor's monthly invoice shall be presented in a format proposed by the Contractor and accepted by the Contracting Officer. Invoices shall be submitted by the 25th of each month for the previous month. Invoices shall be submitted to:

Name: Contracting Officer
Address: 89th Contracting Squadron
1419 Menoher Drive
Andrews AFB, MD 20762-6500
Phone number: (301) 981-6509

2. Outage Report. The Contractor's monthly outage report will be prepared in the format proposed by the Contractor and accepted by the Contracting Officer. Outage reports shall be submitted by the 25th of each month for the previous month. Outage reports shall be submitted to:

Name: Deputy Chief of Operations
Address: 89 CES/CEOD
3465 North Carolina Avenue
Andrews AFB, MD 20762-6500
Phone number: (301) 981-7416

3. Meter Reading Report. The monthly meter reading report shall show the current and previous month readings for all secondary meters. The Contractor's monthly meter reading report will be prepared in the format proposed by the Contractor and accepted by the Contracting Officer. Meter reading reports shall be submitted by the 15th of each month for the previous month. Meter reading reports shall be submitted to:

Name: Deputy Chief of Operations
Address: 89 CES/CEOD
3465 North Carolina Avenue
Andrews AFB, MD 20762-6500
Phone number: (301) 981-7416

J2.7 Water Conservation Projects

IAW C.3, Utility Service Requirement, no projects have been implemented by the Government for conservation purposes.

J2.8 Service Area

IAW Paragraph C.4, Service Area, the service area is defined as all areas within the boundaries of Andrews AFB, as well as the remotely located Brandywine Receiver Site, and the Davidsonville Transmitter Site.

J2.9 Off-Installation Sites

The off-installation sites described as Brandywine Receiver Site and Davidsonville Transmitter Site are included in the sale of the Andrews AFB water distribution system. Specific and unique information on these sites is identified in the above sections.

J2.10 Specific Transition Requirements

IAW Paragraph C.13, Transition Plan, **Table 7** lists service connections and disconnections required upon transfer, and **Table 8** lists the improvement projects required upon transfer of the Andrews AFB water distribution system.

TABLE 7
Service Connections and Disconnections
Water System Andrews AFB

Location	Description
None	

J2.11 Government Recognized System Deficiencies

Table 8 provides a listing of system improvements that the Government has planned for in the near future. The Government recognizes these improvement projects as current deficiencies associated with the Andrews AFB water distribution system. The Contractor shall make a determination as to the actual need and timing of any and all proposed projects. Capital upgrade projects shall be proposed through the Capital Upgrades and Renewal and Replacement Plan process and will be recovered through Sub-CLIN 0003AB. Renewal and Replacement projects will be recovered through Sub-CLIN 0003AC.

TABLE 8
System Deficiencies
Water System Andrews AFB

Project Location	Project Description
Main Base (Facility 3589 and 4614)	Demolish or refurbish two water towers (Facility 3589 and 4614) that have been out of service since 1993
Main Base (Valves)	Many old valves are broken or leak. This includes 18 each, 14 inch valves; 16 each, 12 inch valves; 12 each, 10 inch valves; 28 each, 8 inch valves; and 32 each, 6 inch valves. The base has also been unable to locate some valves identified on the water system drawings. This includes 2 each, 14 inch valves; 1 each, 12 inch valves; 8 each, 10 inch valves; 14 each, 8 inch valves; and 21 each, 6 inch valves.